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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,825	09/12/2003	Thomas Herbert Peterson	134687NV (MHM 15085US01)	7037
	7590 05/28/200 S HELD & MALLOY,	EXAMINER		
500 WEST MADISON STREET			MEHTA, PARIKHA SOLANKI	
SUITE 3400 CHICAGO, IL 60661			ART UNIT	PAPER NUMBER
,			3737	
			MAIL DATE	DELIVERY MODE
			05/28/2008	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/660,825	PETERSON, THOMAS HERBERT		
Office Action Summary	Examiner	Art Unit		
	PARIKHA S. MEHTA	3737		
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet with the	e correspondence address		
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be downward will expire SIX (6) MONTHS from the cause the application to become ABANDON 1.136(a).	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).		
Status				
1) ☐ Responsive to communication(s) filed on 27 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This action is application is in condition for allow closed in accordance with the practice under the condition of the condition is in condition.	his action is non-final. vance except for formal matters, p			
Disposition of Claims				
4) ☐ Claim(s) <u>1-20</u> is/are pending in the application 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1-20</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.			
Application Papers				
9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the	ccepted or b) objected to by the ne drawing(s) be held in abeyance. S ection is required if the drawing(s) is c	see 37 CFR 1.85(a). Objected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summa Paper No(s)/Mail 5)  Notice of Informa 6)  Other:			

### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28 March 2008 has been entered.

# Claim Objections

2. Claim 13 objected to under 37 CFR 1.75 as being a substantial duplicate of claim 6. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Kami et al (US Patent No. 5,339,799), hereinafter Kami ('799).

Regarding claims 1, 4, 6 and 13, Kami ('799) discloses a medical instrument comprising a support member 123 operatively connected to a needle-tipped laser probe 122 ("a flexible engaging member having an operative distal tip") and a strain gauge 121 affixed to an outer portion of the needle, wherein the strain gauge detects movement of the operative distal tip of the laser probe (Fig. 18, col. 12 line 62 – col. 13 lines 5, col. 13 lines 24-28). The laser probe is interpreted to constitute a needle by the

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common definition of that term as set forth by Merriam Webster ("a slender pointed object resembling a needle").

FIG. 18

125u
125r
125r
125d
125d
1225d

Source: Kami ('799); Drawings p. 11 of 35

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 2, 3, 5, 7-12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kami ('799).

Regarding claims 2, 3, 8 and 9, Kami ('799) substantially teaches all features of the present invention as previously discussed for claims 1 and 4, but does not expressly teach the strain gauge to change resistance upon deflection, nor does Kami ('799) expressly teach the strain gauge to be within an electrical circuit as claimed. Examiner hereby takes Official Notice that it is known in the art to use a Wheatstone bridge (i.e., an "electrical circuit in which a potential difference occurs when the resistance of the strain gauge changes") with a strain gauge to detect deflection of medical instruments (see for example US Patent No. 4,993,428). Accordingly, it would have been obvious to one of ordinary skill in the art to use a known Wheatstone bridge with the strain gauge of Kami ('799) in order to achieve the present invention, as such a combination of known prior art elements to yield predictable results has previously been held as unpatentable (see for precedent KSR International Co. v. Teleflex Inc, 82 USPQ2d 1385).

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**Regarding claim 5**, Kami ('799) does not expressly teach a second strain gauge affixed to the laser probe. Applicant does not disclose that the additional strain gauge solves a particular problem, is used for a specific purpose, or presents a patentable advantage over prior art single-gauge arrangements. Furthermore, it has previously been held that the mere duplication of known elements is unpatentable over the prior art (see MPEP 2144, *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)). Accordingly, it would have been obvious to one of ordinary skill in the art to include a second strain gauge on the laser probe of Kami ('799) in order to achieve the presently claimed invention.

**Regarding claims 7 and 12**, Kami ('799) teaches all features as discussed for claims 1 and 4, and further teaches an optical system that is capable of tracking the position of the laser probe (col. 19 lines 8-37, Fig. 38).

**Regarding claim 10**, Kami ('799) includes a processing unit 128 that correlates the output of the strain gauge with an amount of movement of the laser probe (col. 13 lines 8-17).

**Regarding claim 11**, Kami ('799) includes an embodiment having a display that shows the medical instrument (Figs. 35 & 36).

Regarding claims 14-20, Kami ('799) teaches a method of using the system discussed for claims 1-13 including steps of tracking a medical instrument with an optical tracking system (col. 19 lines 8-37), and a method of tracking movement of the distal tip of the needle with the strain gauge (col. 12 line 62 – col. 13 line 5, col. 13 lines 24-28). Although Kami ('799) does not explicitly teach the use of these two methods together in a single procedure, it would have been obvious to one of ordinary skill in the art to do so in view of the teach of Kami ('799) the optical system is advantageous for realizing precise operations (col. 19 lines 11-12).

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PARIKHA S. MEHTA whose telephone number is (571)272-3248. The examiner can normally be reached on M-F, 8 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571.272.4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian L Casler/ Supervisory Patent Examiner, Art Unit 3737

/Parikha S Mehta/

Examiner, Art Unit 3737